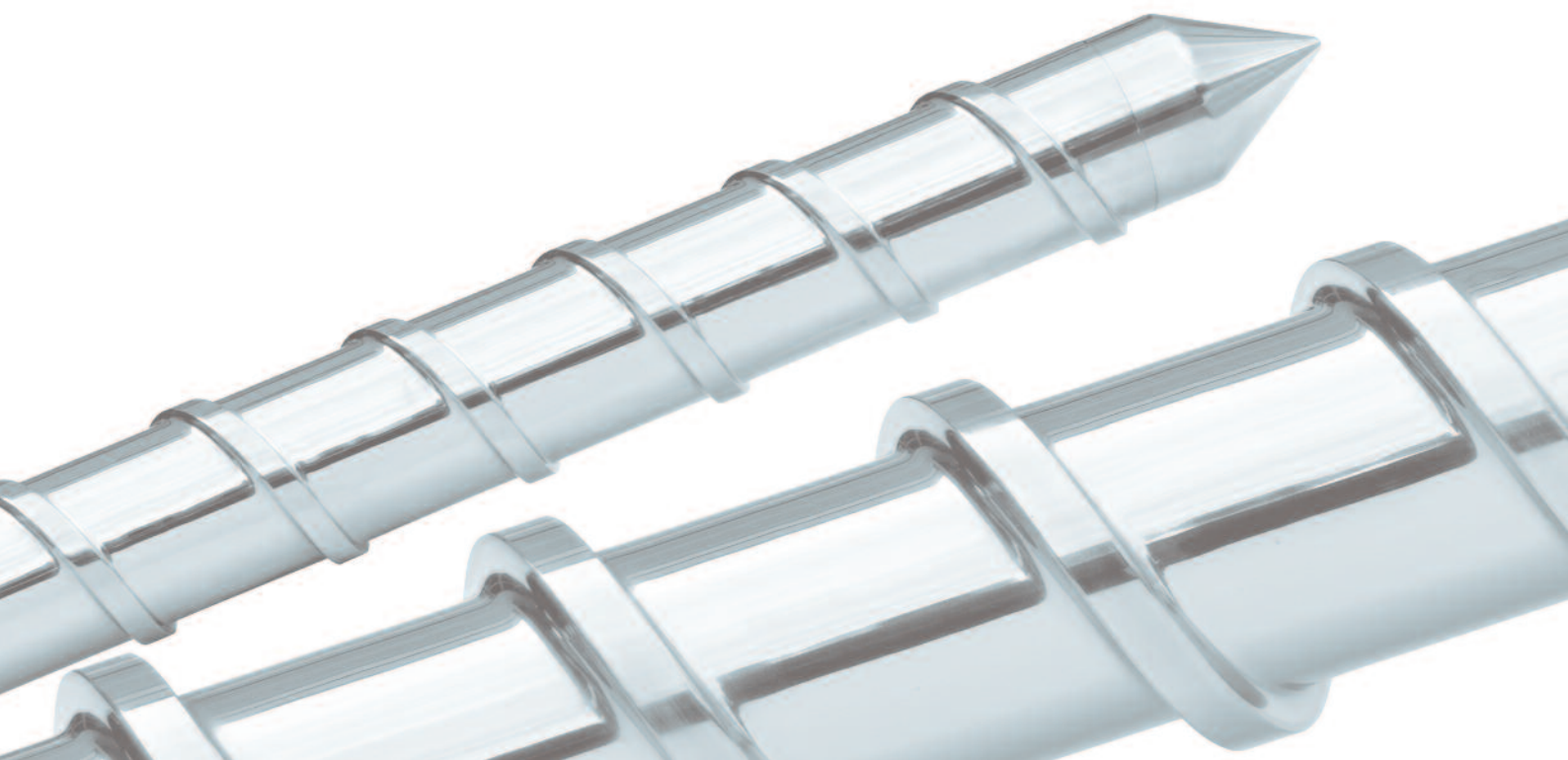
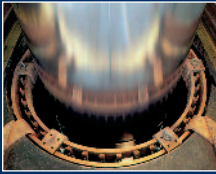


**TECHNICAL HARD CHROMIUM-PLATING
AND ELECTROLESS NICKEL-PLATING
FOR THE PLASTICS INDUSTRY**



Need something a little more precise?

Mechanical properties, form tolerances and also surface quality of a wide variety of workpieces are crucial to the quality of an end product. You can gain a crucial edge over your competitors here precisely by choosing the right surface-treatment partner. We have made a name for ourselves worldwide as specialists in plating thanks to our state-of-the-art infrastructure and our specialist knowledge, gained over many, many years. We can handle any challenge from matt to rough ($R_z \leq 80 \mu\text{m}$) through to mirror-finish high gloss ($R_z, R_{\text{max}} < 0.05 \mu\text{m}$). Our outstanding engineering and precise jig and fixture construction ensure you maximum precision, particularly in the case of complex geometries. Make use of the fine difference.



Technical hard chromium-plating

- Length up to 12 m
- Diameter up to 2.3 m
- Weight up to 25 metric tons



Electroless nickel-plating

- Length up to 2 m
- Width up to 0.6 m
- Height up to 1.6 mm

Larger dimensions on request



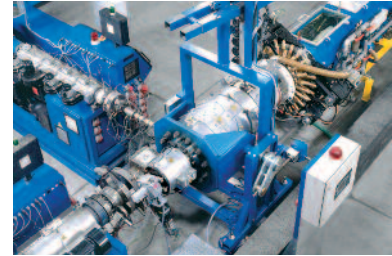
Cylindrical grinding

- Length up to 12 m
- Diameter up to 2.3 m
- Weight up to 25 metric tons

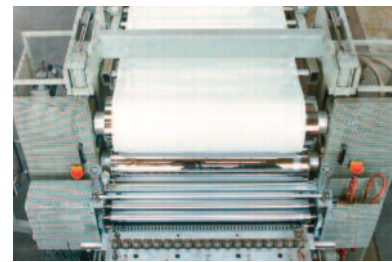


Dehydrogenate

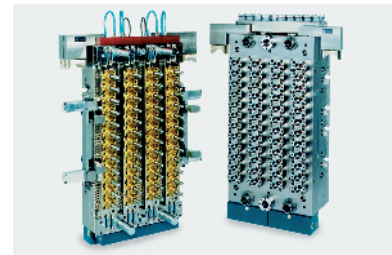
- Length up to 8 m
- Diameter up to 2.3 m
- Weight up to 15 metric tons
- Continuously variable temperature up to 300 °C



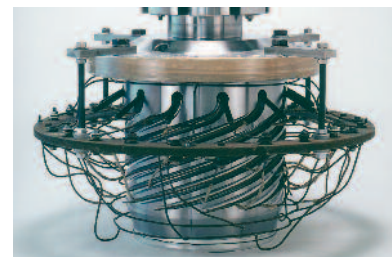
Injection-moulding machine



Calendar stack for film casting system



Compression mould for PET bottle blanks



Anode construction for spiral mandrel

Variants of technical hard chromium-plating:

- Mass hard chromium-plating, Heavy hard chromium-plating
 - Multilayer hard chromium-plating (special M-DURIT® process)
 - Matt hard chromium-plating, Electrolytic matt hard chromium-plating
 - Structured surfaces with defined roughness
 - Special SATIN® process
 - Hydrophile hard chromium-plating
 - Combined plating (electroless nickel - chromium, chromium - PTFE)
-

Base materials:

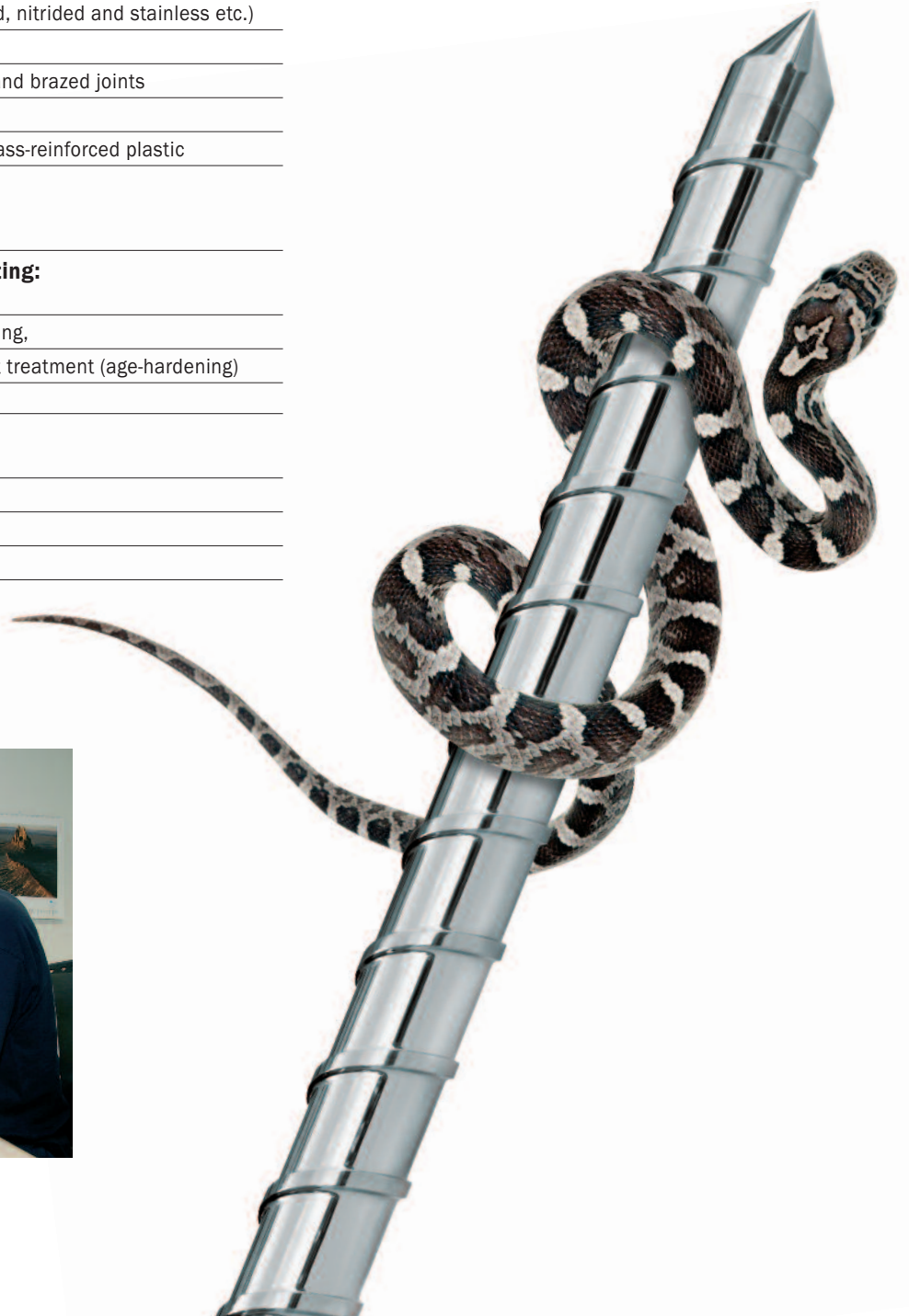
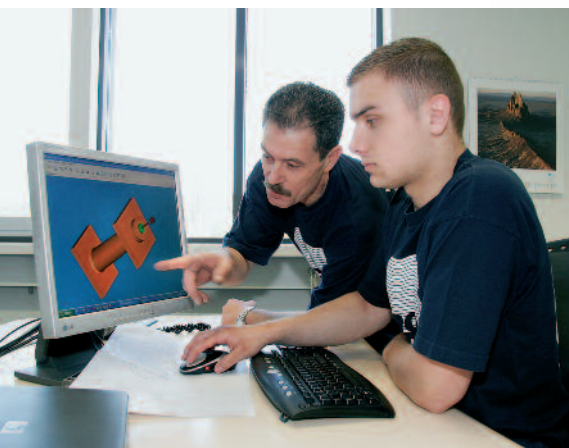
- All types of steel (including hardened, nitrided and stainless etc.)
 - Castings, Aluminium, Zinc
 - Copper, brass, bronze, nickel-silver and brazed joints
 - Nickel-plated workpieces
 - Carbon fibre-reinforced plastics / Glass-reinforced plastic
-

Variants of electroless nickel-plating:

- Mass nickel-plating, matt nickel-plating,
including de-embrittlement and heat treatment (age-hardening)
-

Base materials:

- All types of steel, castings
 - Non-ferrous metals, aluminium
 - Titanium
-

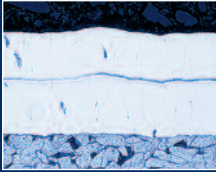


Plating variants



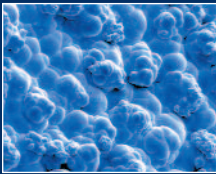
Hard chromium-plating (special DURIT® process)

For wear and corrosion protection, to improve the coefficients of friction and adhesion properties and as protection against chemical action



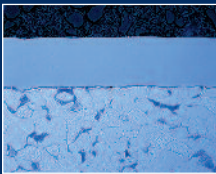
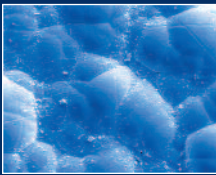
Multilayer hard chromium-plating (special M-DURIT® process)

For workpieces subject to more corrosive ambient conditions, such as hydraulic components, pneumatic components and components for the chemical industry



Matt hard chromium-plating (special SATIN® process)

For production of technical laminates, films, foils, transport rollers, textile rollers (orange peel) and in both the optical industry and the furniture industry



Electroless nickel

Mouldmaking/toolmaking, the plastics industry and general mechanical engineering and machine construction



Electroless nickel, hard chromium

Hydraulic components in mines and pits, workpieces used in seawater environments and vehicle construction, extrusion systems

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